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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/981,190	10/16/2001	Engelbert van Pelt	US 018170	5403

7590 04/08/2004

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EXAMINER	
QUINONES, ISMAEL C	

ART UNIT	PAPER NUMBER
2686	6

DATE MAILED: 04/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/981,190	VAN PELT ET AL.	
	Examiner	Art Unit	
	Ismael Quiñones	2686	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 October 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *5*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on August 4th, 2003 has being considered by the examiner and made of record in the application file.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

"Modular headset for cellphone or MP3 player" does not go in accordance to the statements of the claims or the scope of the intended invention in general; a suggested title for the application could be one such as "Modular headset for cellphone or audio device" or "Multi-functional modular headset".

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 1-8, 10, 12, and 14-16** are rejected under 35 U.S.C. 102(b) as being anticipated by Tuoriniemi et al. (U.S Pat. No. 5,978,689).

Regarding **claim 1**, Tuoriniemi et al. disclose an electronic device comprising a headset (Electronic devices such as audio devices, a cellular telephone or a incorporation of both, comprising a headset; *col. 2, lines 35-37; col. 4, lines 8-34; col. 8, lines 61-63; Fig. 1, item 22; Figs. 5 and 7, items 22 and 70*) with a first unit that has: a first interface for receiving a first input signal (Wherein a telephone audio signal is carried by a conductor, and subsequently received by a first unit which comprises interface means such as a microphone, speaker, and a switch for alternating operational modes; *col. 4, lines 47-58; col. 6, lines 9-20; col. 14, lines 23-27 and 52-58; col. 16, lines 31-37; Fig. 2, items 10, 16, 20 and 34*); a processor for processing the first input signal to generate a first audio signal in a first operational mode of the first unit (A processor or micro-controller that process an indicating operational mode signal or "off-hook" signal, bypassing an audio speech signal to the first unit microphone and sending a telephone audio signal received at the microphone to a transmitter; *col. 6, lines 12-20*); a second interface for receiving a second input signal in a second operational mode, different from the first operational mode, of the headset for generating a second audio signal (Wherein the electronic device comprise a secondary interface such as a secondary speaker, volume control, and user operated functions, such features enabled when a micro-controller receives and "on-hook" signal or second input signal for switching to a secondary operational mode and receiving an audio signal forwarded to both first and secondary speaker; *col. 6, lines 22-33; col. 9, lines 17-22; col. 10, lines 37-42; col. 14, lines 55-58*).

Regarding **claim 2**, and as applied to claim 1, Tuoriniemi et al. disclose the aforementioned device, wherein the unit in the first operational mode has a stand-alone

functionality (Wherein the first operation mode do not require the second speaker when selected for handling telephone audio signals, in view of that both telephone and audio devices can be separate from another; *col. 3,lines 19-44; col. 6, lines 51-54; col. 7, lines 21-26*).

Regarding **claim 3**, and as applied to claim 1, Tuoriniemi et al. disclose the aforementioned device, wherein: the headset has a second unit for connecting to the second interface (A secondary unit that comprises a speaker and interface means such as volume control and user operated functions; *col. 6, lines 21-22; col. 10, lines 37-42; col. 13, lines 50-51; Figs. 1, 2, 5, 7, 8, item 20*); the second unit has a second processor for generating the second input signal (Wherein carrying out a secondary operational mode the second unit handles audio signals conveyed from the audio device that further comprises control means for audio processing functions, said audio device exemplified by a radio receiver or a CD player; *col. 1, lines 25-27 and 38*); and the second operational mode of the first unit involves cooperation with the second unit (Wherein switching to second operational mode comprise the deployment of both first and secondary speakers; *col. 3, lines 36- 38; col. 14, lines 52-58*).

Regarding **claim 4**, and as applied to claim 3, Tuoriniemi et al. disclose the aforementioned device, wherein: at least the first unit or the second unit has a power source; and the first and second units share the power source in the second operational mode (Wherein the first and second unit comprise the voltage supply or power supply means, and both first and second speaker share the same power source; *col. 2, lines 59-61; col. 4, lines 25-34*).

Regarding **claim 5**, and as applied to claim 3, Tuoriniemi et al. disclose the aforementioned device, wherein: at least the first unit or the second unit has a memory; and the first and second units functionally share the memory in the second operational mode (Wherein the both first unit and second unit share a micro-controller, said micro-controller further comprising memory means for storing programs or operative states functionalities according to a first and secondary operational mode; *col. 5, lines 47-50; col. 10, lines 1-5*).

Regarding **claim 6**, and as applied to claim 3, Tuoriniemi et al. disclose the aforementioned device, wherein: at least the first or the second unit has a processor; and the first and second units functionally share the processor in the second operational mode (Wherein the speakers from both first and secondary unit share a micro-controller that bypass an audio signal from an audio device to said speakers; *col. 6, lines 21-32; col. 7, lines 30-32; col. 10, lines 36-37*).

Regarding **claim 7**, and as applied to claim 3, Tuoriniemi et al. disclose the aforementioned device, wherein at least the first or the second unit has a user interface for enabling a user to control at least the first or the second audio signal (Wherein a user can manually select first and second operational modes; *col. 7, lines 42-47; col. 14, lines 23-27 and lines 59-63*); and the first and second units functionally share the user control in the second operational mode (Wherein the speakers from both first and secondary unit share a micro-controller that bypass an audio signal from an audio device to said speakers; *col. 6, lines 21-32; col. 7, lines 30-32; col. 10, lines 36-37*).

Regarding **claim 8**, and as applied to claim 2, Tuoriniemi et al. disclose the aforementioned device, wherein the first unit functions in the first operational mode as an earpiece for a mobile phone (col. 3, lines 32-36; col. 4, lines 8-20; col. 6, lines 55-67; *Figs. 1, 5, and 7, items 12, 14, 15, 16, and 20*).

Regarding **claim 10**, and as applied to claim 3, Tuoriniemi et al. disclose the aforementioned device, wherein the first unit functions in the second operational mode as an earpiece for one channel of stereo audio generated by the second unit (An audio signal from an audio device such as a receiver station or CD player is outputted through the speaker from the first unit, when operating in a second state or secondary operational mode; *col. 3, lines 36-38; col. 6, lines 21-33*).

Regarding **claim 12**, Tuoriniemi et al. disclose a first headset unit comprising: a first interface for receiving a first input signal (Wherein a telephone audio signal is carried by a conductor, and subsequently received by a first unit which comprises interface means such as a microphone, speaker, and a switch for alternating operational modes; *col. 4, lines 47-58; col. 6, lines 9-20; col. 14, lines 23-27 and 52-58; col. 16, lines 31-37; Fig. 2, items 10, 16, 20 and 34*); a processor for processing the first input signal to generate a first audio signal in a first operational mode of the first unit (A processor or micro-controller that process an indicating operational mode signal or "off-hook" signal, bypassing an audio speech signal to the first unit microphone and sending a telephone audio signal received at the microphone to a transmitter; *col. 6, lines 12-20*); a second interface for receiving a second input signal in a second operational mode, different from the first operational mode, of the headset for generating a second audio signal (Wherein

the electronic device comprise a secondary interface such as a secondary speaker, volume control, and user operated functions, such features enabled when a micro-controller receives and "on-hook" signal or second input signal for switching to a secondary operational mode and receiving an audio signal forwarded to both first and secondary speaker; *col. 6, lines 22-33; col. 9, lines 17-22; col. 10, lines 37-42; col. 14, lines 55-58*).

Regarding **claim 14**, and as applied to claim 12, Tuoriniemi et al. disclose the aforementioned first headset unit, operative to switch between the operational modes under control of the second interface (A secondary interface such as user operated switch or off-hook circuitry for enabling a micro-controller to receive a "on-hook" signal or second input signal for switching to a secondary operational mode and receiving an audio signal forwarded to both first and secondary speaker; *col. 6, lines 22-33; col. 9, lines 17-22; col. 10, lines 37-42; col. 14, lines 55-58*).

Regarding **claim 15**, Tuoriniemi et al. disclose a second headset unit for upon connection to an interface of a first headset unit sharing a resource of the second headset unit (Wherein resources such as audio speakers, a power source, control means such as a micro-controller, and a memory integrated in the micro-controller are shared when a first and second unit are operating in secondary operational mode, said first unit comprising a first headset configuration wherein a speaker and a microphone are enabled for first operational mode, furthermore said second operational mode disabling microphone functionality and enabling first and second speakers for a new headset configuration; *col. 4, lines 47-58; col. 6, lines 9-22; col. 10, lines 37-42; col. 13, lines 50-51; col. 14, lines*

23-27 and 52-58; col. 16, lines 31-37; Fig. 2, items 10, 16, 20 and 34; Figs. 1, 2, 5, 7, 8, item 20).

Regarding **claim 16**, and as applied to claim 15, Tuoriniemi et al. discloses the aforesaid second headset unit, comprising a stereo audio processor (Wherein carrying out a secondary operational mode the second unit handles audio signals conveyed from the audio device that further comprises control means for audio processing functions, said audio device exemplified by a radio receiver or a CD player; *col. 1, lines 25-27 and 38*).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. **Claims 9 and 13** are rejected under 35 U.S.C. 103(a) as being unpatentable over Tuoriniemi et al. (U.S Pat. No. 5,978,689) in view of Baranowski et al. (WO 01/19054).

Regarding **claim 9**, and as applied to claim 8, Tuoriniemi et al. disclose the aforementioned device equipped with a transceiver. Tuoriniemi et al. fails to clearly specify wherein the transceiver wirelessly communicates with the mobile phone.

However in the same field of endeavor, Baranowski et al. disclose a device such as head set communicating wirelessly with a mobile phone (*Page 3, lines 3-5; Page 12, line 3; Page 5, lines 3-4 and 7-11; Page 13, lines 5-6; Figs. 1-3, items 100 and 250*).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have Tuoriniemi et al. device equipped with a transceiver to communicate wirelessly with a mobile phone as taught by Baranowski et al. For the purpose of hands-free operation while handling a telephone conversation, instead of restraining the user's movement with wired connectivity means between the headset and the mobile phone.

Regarding **claim 13**, and as applied to claim 12, Tuoriniemi et al. disclose the aforementioned first headset unit equipped with a transceiver. Tuoriniemi et al. fails to clearly specify wherein the transceiver wirelessly communicates with the mobile phone.

However in the same field of endeavor, Baranowski et al. disclose a device such as head set communicating wirelessly with a mobile phone (*Page 3, lines 3-5; Page 12, line 3; Page 5, lines 3-4 and 7-11; Page 13, lines 5-6; Figs. 1-3, items 100 and 250*).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have Tuoriniemi et al. device equipped with a transceiver to communicate wirelessly with a mobile phone as taught by Baranowski et al. For the purpose of hands-free operation while handling a telephone conversation, instead of

restraining the user's movement with wired connectivity means between the headset and the mobile phone.

8. **Claim 11** is rejected under 35 U.S.C. 103(a) as being unpatentable over Tuoriniemi et al. (U.S Pat. No. 5,978,689) in view of Novakok (U.S. Pat. No. 6,571,103).

Regarding **claim 11**, and as applied to claim 3, Tuoriniemi et al. disclose the aforementioned device comprising a first and second unit. Tuoriniemi et al. fail to clearly specify wherein: each of the first and second units comprises respective Bluetooth communication components; each of the first and second units has a respective MAC address; and when in the second operational mode, a specific one of the first and second units assumes a role of a master and the other unit assumes a role of a slave determined by the respective MAC addresses.

However in the same field of endeavor, Novakok discloses a method for establishing wireless communication between a first and secondary unit utilizing a short range RF communication technology such as Bluetooth, (*col. 4, lines 16-23*). Furthermore Novakok discloses each of the first and second units with a respective MAC address (*col. 5, lines 19-21*); when in a operational mode, such as power saving mode, a specific one of the first and second units assumes a role of a master and the other unit assumes a role of a slave determined by the respective MAC addresses (A local station or first unit assigns a MAC address to a second unit such as a mobile station making it possible to connect more second unit the first unit, as a result the local station or first unit acts as master and the mobile station or second unit as a slave; *col. 5, lines 7-28*).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have Tuoriniemi et al. electronic device comprising first and second units to include short range wireless communication means such as Bluetooth, wherein said first and second unit assumes the role of master and slave according to their respective MAC address, as taught by Novakok. For the purpose of having one device controlling the functionalities of another one, wherein the operation capabilities of the latter one depend on the arrangement between both devices.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Nickum (U.S. Pat. No. 6,104,819), Combination Speaker and Earphone Apparatus.

b. Smith (U.S. Pat. No. 5,388,155), Cordless Phone Holder Enabling Hands Free Use.

c. Quintana et al. (U.S. P.G.-Pub. No. 2002/0074370), Apparatus and Method for Using a Wearable Computer in Testing and Diagnostic Applications.

10. Any response to this Office Action should be **faxed to** (703) 872-9306 or **mailed to:**

Commissioner of Patents and Trademarks

P.O. Box 1450

Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Crystal Park II

2021 Crystal Drive

Arlington, VA 22202

Sixth Floor (Receptionist)

11. Any inquiry concerning this communication on earlier communications from the Examiner should be directed to Ismael Quiñones whose telephone number is (703) 305-8997. The Examiner can normally be reached on Monday-Friday from 8:00am to 5:00pm.

12. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Marsha D. Banks-Harold can be reached on (703) 305-4379, and fax number is (703) 746-9818. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9301.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose number is (703) 305-4700 or call customer service at (703) 306-0377.

Ismael Quiñones

I.Q.

March 31, 2004